

183. (previously presented) A method as claimed in claim 182, wherein the strengthening is by maintaining a frequency count of how often the associating neuron receives input from the initiating neuron and the associated neuron.

184. (previously presented) A method as claimed in claim 176, wherein the associating neuron represents the sum of what is represented by the initiating neuron and the associated neuron.

185. (cancelled)

186. (previously presented) A method as claimed in claim <sup>172</sup>185, wherein a memory represents a plurality of elemental stimuli, and each elemental stimulus is represented directly by an elemental neuron.

187. (previously presented) A method as claimed in claim 172, wherein the number of elemental neurons required to represent the memory is determined by the nature of the input being processed.

188. (previously presented) A method as claimed in claim 172, wherein each neuron is represented by an addressable node in an array, each node having a plurality of pointers.

189. (previously presented) A method as claimed in claim 172, wherein the plurality of elemental neurons is in a root level of the neural network.

190. (previously presented) A method as claimed in claim 176, wherein each initiating neuron is able to associate with a plurality of associated neurons to form a plurality of pairs of neurons.